



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,700	03/22/2005	Ralf Noerenberg	268093US0PCT	7149

  

22850	7590	07/17/2007
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.		
1940 DUKE STREET		
ALEXANDRIA, VA 22314		

  

EXAMINER	
SOLOLA, TAOFIQ A	

  

ART UNIT	PAPER NUMBER
1625	

  

NOTIFICATION DATE	DELIVERY MODE
07/17/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

# Office Action Summary

Application No.

10/528,700

Applicant(s)

NOERENBERG ET AL.

Examiner

Taofiq A. Solola

Art Unit

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 6/11/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 29-32 and 40-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 21-28, 33-39 and 44-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1625

Claims 1-59 are pending in this application

Claims 29-32, 40-43, 21-28 (in part), 33-39 (in part), 44-59 (in part) are drawn to non-elected invention.

***Response to Restriction Requirement***

The election of group I, claims 21-28 (in part), 33-39 (in part), 44-59 (in part) with traverse in the Paper filed 6/11/07, is hereby acknowledged. The traversal is on the basis that the Examiner fails to explain why the groups lack unity of invention. This is not persuasive for reasons set forth in the Restriction Requirement. Applicant also argues that the Examiner fails to interpret the claims in light of the specification as required under PCT Rule 13.1 and 13.2. This is not persuasive because the Examiner did just that. Applicant further contends that the compounds of formula (I) in claim 21 meet requirement (A) of MPEP 1850 (B), and 1,3-furandione in formula (I) meet requirement (B) of the same section of the MPEP. Having met both requirements, applicant asserts the invention relates to a single inventive concept under PCT Rule 13.1. This is not persuasive because "a contribution which each of the inventions, considered as a whole, makes over the prior art" under PCT Rule 13.2, quoted by applicant means novelty and nonobviousness. Since 1,3-furandione is well known in the art it fails the requirement under PCT Rule 13.2.

Therefore, the restriction is still proper and made FINAL.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 1625

Claims 21-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims are drawn to compounds which comprises alkylglycidol carbonate of formula I. According to the specification, the invention relates to alkylglycidol carbonates useful as cosurfactants. The term "comprising" in claim 21, implies the claims are drawn to alkylglycidol carbonates and other non-essential components not identified, yet the claim is drawn to a compound, which must comprise only itself. A compound cannot be described with open-ended term. Applicant must show possession of the invention by describing it with all the claimed limitations. *Lookwood v. American Airlines Inc.* 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed Cir. 1997). By deleting "comprising" in claim 21, the rejection would be overcome.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 21-28, 33-39, 44-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For the reason set forth above under 35 USC 112, first paragraph, claims 21-28 are confusing and therefore, indefinite. See the Examiner's suggestion above.

The phrases containing all reference to degree of branching in claims 21-23, 25, 28; and the mixture of R1X in claim 26 render claims 21-28, 33-39, 44-59 unclear and confusing, and therefore the claims are indefinite. According to the specification, pages 7-8, degree of

Art Unit: 1625

branching relates to branched alcohol and the mixture of R1X relates to impure (technical grade) alcohols that may be used in the preparation of compounds of formula (I) instead of a linear or a pure alcohol respectively. The specification fails to disclose any advantage or significance for using the alcohols. Also, these are acquired reagents not applicant's invention. Therefore, these characteristics of the alcoholic reagents have no patentable significance. In patent examination, it is essential for claims to be precise, clear, correct, and unambiguous. *In re Zletz*, 893 F.2d 319, 13 USPQ2d 1320 (Fed. Cir. 1989). By deleting all reference to degree of branching and mixtures of R1X the rejection would be overcome.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-24, 27-28, 33-34, 36-39, 44-45, 47-48, 50-51, 54-55, 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Horibe et al., JP 2001/300286.

Horibe et al., disclose the marked compounds in the attached abstract and their compositions as surfactants. Applicant should note that intended use is not a limitation of a compound or composition. *In re Hack*, 114USPQ 161 (CCPA, 1957); *In re Craig*, 90 USPQ 33 (CCPA, 1951); *In re Brenner*, 82 USPQ 49 (CCPA, 1949).

The cited intended use are inherent in the compositions/compounds of the prior arts even if the activities were not known at the time of prior arts' invention. See *In re Best*, 562 F.2d 1252; 195 USPQ 430 (CCPA, 1977), *Titanium Metals Corp. v Banner*, 778 F.2d 775 (Fed. Cir.

Art Unit: 1625

1985), *Continental Can Co. v Monsanto Co.*, 948 F.2d 1264 (Fed. Cir. 1991), *In re Cruciferous Sprout Litig.*, 301 F.3d 1343 (Fed. Cir. 2002), *In re Crish*, 393 F.3d 1253 (Fed. Cir. 2004).

Something old or obvious does not become new upon discovery of new properties, functions or utilities except applicant, by a side-by-side study, shows the compositions/compounds of the prior arts do not have the asserted properties. *In re Best*, 195 USPQ 430 (CCPA, 1977).

Claims 21-24, 27-28, 33-34, 36-39, 44-45, 47-48, 50-51, 54-55, 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Mouloungui et al., Eur. J. Lipid Sc. Tech. (2001) Vol. 103(4), pgs 216-222.

Mouloungui et al., disclose the marked compounds in the attached abstract and their compositions as surfactants. Applicant should note that intended use is not a limitation of a compound or composition. *In re Hack*, 114USPQ 161 (CCPA, 1957); *In re Craig*, 90 USPQ 33 (CCPA, 1951); *In re Brenner*, 82 USPQ 49 (CCPA, 1949).

The cited intended use are inherent in the compositions/compounds of the prior arts even if the activities were not known at the time of prior arts' invention. See *In re Best*, 562 F.2d 1252; 195 USPQ 430 (CCPA, 1977), *Titanium Metals Corp. v Banner*, 778 F.2d 775 (Fed. Cir. 1985), *Continental Can Co. v Monsanto Co.*, 948 F.2d 1264 (Fed. Cir. 1991), *In re Cruciferous Sprout Litig.*, 301 F.3d 1343 (Fed. Cir. 2002), *In re Crish*, 393 F.3d 1253 (Fed. Cir. 2004).

Something old or obvious does not become new upon discovery of new properties, functions or utilities except applicant, by a side-by-side study, shows the compositions/compounds of the prior arts do not have the asserted properties. *In re Best*, 195 USPQ 430 (CCPA, 1977).

Claims 21-24, 27-28, 33-34, 36-39, 44-45, 47-48, 50-51, 54-55, 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Tashiro et al., JP 1991/03065232.

Tashiro et al., disclose the marked compounds in the attached abstract and their compositions as surfactants. Applicant should note that intended use is not a limitation of a compound or composition. *In re Hack*, 114USPQ 161 (CCPA, 1957); *In re Craig*, 90 USPQ 33 (CCPA, 1951); *In re Brenner*, 82 USPQ 49 (CCPA, 1949).

The cited intended use are inherent in the compositions/compounds of the prior arts even if the activities were not known at the time of prior arts' invention. See *In re Best*, 562 F.2d 1252; 195 USPQ 430 (CCPA, 1977), *Titanium Metals Corp. v Banner*, 778 F.2d 775 (Fed. Cir. 1985), *Continental Can Co. v Monsanto Co.*, 948 F.2d 1264 (Fed. Cir. 1991), *In re Cruciferous Sprout Litig.*, 301 F.3d 1343 (Fed. Cir. 2002), *In re Crish*, 393 F.3d 1253 (Fed. Cir. 2004).

Something old or obvious does not become new upon discovery of new properties, functions or utilities except applicant, by a side-by-side study, shows the compositions/compounds of the prior arts do not have the asserted properties. *In re Best*, 195 USPQ 430 (CCPA, 1977).

Claims 21-24, 27-28, 33-34, 36-39, 44-45, 47-48, 50-51, 54-55, 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawakata et al., JP 1985/60228472.

Kawakata et al., disclose the marked compounds in the attached abstract and their compositions as surfactants. Applicant should note that intended use is not a limitation of a compound or composition. *In re Hack*, 114USPQ 161 (CCPA, 1957); *In re Craig*, 90 USPQ 33 (CCPA, 1951); *In re Brenner*, 82 USPQ 49 (CCPA, 1949).

The cited intended use are inherent in the compositions/compounds of the prior arts even if the activities were not known at the time of prior arts' invention. See *In re Best*, 562 F.2d 1252; 195 USPQ 430 (CCPA, 1977), *Titanium Metals Corp. v Banner*, 778 F.2d 775 (Fed. Cir. 1985), *Continental Can Co. v Monsanto Co.*, 948 F.2d 1264 (Fed. Cir. 1991), *In re Cruciferous Sprout Litig.*, 301 F.3d 1343 (Fed. Cir. 2002), *In re Crish*, 393 F.3d 1253 (Fed. Cir. 2004).

Art Unit: 1625

Something old or obvious does not become new upon discovery of new properties, functions or utilities except applicant, by a side-by-side study, shows the compositions/compounds of the prior arts do not have the asserted properties. *In re Best*, 195 USPQ 430 (CCPA, 1977).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-28, 33-39, 44-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over all the prior arts cited above, in view of Rubinfield et al., US 3,320,174, Durbut et al., WO 97/04059, (Durbut I) Durbut et al., WO 98/00418 (Durbut II) and Potthoff-Karl et al., US 5,994,290, individually.

Applicant claims compounds of formula (I) and composition thereof. Applicant claims the compositions with intended uses. In preferred embodiments the compositions are in liquid, solid, gel or paste.

#### **Determination of the scope and content of the prior art (MPEP §2141.01)**

Each prior art teaches the compounds cited above and methods of using them as surfactants. See the marked compounds in the abstracts.

#### **Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)**

The difference between the instant invention and that of the prior arts is that Applicant claims various percent compositions of the compounds wherein the length of the carbon chain



Art Unit: 1625

at R1 is either longer or shorter than that of the prior arts. In other words, applicant replaced H with alky in the compounds of the prior arts and vise versa.

*Finding of prima facie obviousness—rational and motivation (MPEP §2142.2413)*

However, Rubinfield et al., (col. 3-8, particularly tables III and IV), Durbut I and II (pages 21-22 and 6-24 respectively) and Potthoff-Karl et al., (col. 12-14, tables 1-2) teach various percent compositions of surfactant/detergent compounds. Also, H and alkyl are art recognized equivalents. *In re Lincoln*, 126 USPQ 477, 53 USPQ 40 (CCPA, 1942); *In re Druey*, 319 F.2d 237, 138 USPQ 39 (CCPA, 1963); *In re Lohr*, 317 F.2d 388, 137 USPQ 548 (CCPA, 1963); *In re Hoehsema*, 399 F.2d 269, 158 USPQ 598 (CCPA, 1968); *In re Wood*, 582 F.2d 638, 199 USPQ 137 (CCPA, 1978); *In re Hoke*, 560 F.2d 436, 195 USPQ 148 (CCPA, 1977); *Ex parte Fauque*, 121 USPQ 425 (POBA, 1954); *Ex parte Henkel*, 130 USPQ 474, (POBA, 1960).

When the difference between compounds is the length of a carbon chain such are adjacent homologs. However, adjacent homologs are prima facie obvious. *In re Henze*, 85 USPQ 261 (1950). For the compounds of the prior art to be used as surfactants they must be used in form of compositions. Therefore, the instant invention is prima facie obvious from the teachings of the prior arts. One of ordinary skill in the art would have known to claim various percent compositions of the compounds at the time the invention was made. The motivation is from knowing that surfactants/cosurfactants are used in various percent compositions of the compounds as taught in the prior arts, from knowing that H and alkyl are equivalents and that adjacent homologs would have similar biochemical properties.

***Priority Claim***

The instant application claims priority to a foreign document. However, a certified English translation copy of the document has not been filed. Therefore, the priority is denied.

Art Unit: 1625

However, the denial would be revisited when the copy is filed. Also, English translation of the International Search Report has not been filed.

***Telephone Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taofiq A. Solola, PhD. JD., whose telephone number is (571) 272-0709.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres, can be reached on (571) 272-0867. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

  
**TAOFIQ SOLOLA**  
**PRIMARY EXAMINER**

Group 1626

June 30, 2007.